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Earthquake Preparations and Plans

Natural disasters, a word you don't hear very often. But when you do, it's not very good. When you think of natural disasters, you think of earthquakes, tsunamis, volcanoes, and other deadly disasters. Let's just focus on earthquakes for this essay. Well, what is an earthquake you may ask? They are when the ground is shaking very fast. They are very destructive and can cause massive death tolls. And when an earthquake actually happens, we need to be prepared for it. And what not a better way than learning from countries that have experienced them.

Earthquakes are a very destructive forces, and we cannot stop them no matter how much we try. This is a crucial piece of evidence because we can't blame geologists for not preventing an earthquake. It's also very hard to predict an earthquake, a reason for death tolls to be so high. The only way that we can predict them are using satellites and numbers, which doesn't sound very easy, now, does it? Another reason why earthquakes are deadly is that of man-made structures. Yes, buildings and anything else humans have created will fall down during a high magnitude earthquake. Maybe not every single one, but badly structured buildings will definitely topple. Sending tons of dust, debris, and glass shards everywhere. Not to mention the fact that these buildings can fall down on to people. That's not even all! An earthquake can cause destroy a town and also cause a tsunami to absolutely devastate it! Tsunamis are basically high walls of

water, in case you were wondering. Just imagine, what would happen if that were to happen, oh wait, it actually did.

You may think that earthquakes are balanced across the world, in that case, you'd be wrong. About 90% of the world's total earthquakes and 81% of the world's major earthquakes occur along the Ring Of Fire, located at the Pacific Ocean. The Ring Of Fire is an area of the earth where the tectonic plates are more active there than in other parts of the world. This makes natural disasters a lot more likely to happen there. One country that is in the Ring Of Fire is Japan. They are well aware that they are in the Ring Of Fire, so they have to take extra precautions for natural disasters, like earthquakes. That is one of the main reasons that they have the most sophisticated early warning systems for earthquakes in the world. They use seismometers, instruments to detect earthquakes, and hook them up to alerts. For example, if an earthquake is happening or is about to happen in Tokyo, people will get alerts on their phones, televisions, radio, etc. There is proof that these methods are working, as the mobile alerts have saved many lives during one of Japan's deadliest earthquakes at a college when a professor got a mobile warning and warned his students to go under their desks. This resulted in not a single death at said location. Another country that prepares for earthquakes is Mexico. They got hit by a monstrous magnitude 9.0 earthquake that decimated Mexico City. Since Mexico is on the ring of fire, they knew another earthquake would come soon, so they decided to prepare for the next earthquake. They repaired all the buildings' structures to withstand an earthquake a lot better, and when the next earthquake did happen, the death toll was significantly lower, but still had a high death toll. As you can clearly see now,

earthquakes are very deadly. But why? What makes them so deadly? We've prepared so much, and still, hundreds die? The reason for that is the irregular patterns of earthquakes. If we could say where an earthquake is going to happen a day or more before it happens, so many lives would be saved. The best warning we have is a few seconds to react at most. But, a way we can try to predict earthquakes are using satellites. We can use satellites by tracking moving tectonic plates, you can see where an earthquake may occur. There are still 2 major flaws to this method though. One, it's not simple. There has to be some serious math involved to find if it even moved at all, and exactly how much it moves can be completely random. Two, it still takes time to notice an earthquake, since tectonic plates can move 13mm one day and then 59mm the next, it's not straightforward to predict. That is probably the main reason for deaths. If we can somehow figure out a formula of how to predict earthquakes 100%, then there would be so much fewer deaths.

Now you may be reading this and thinking 'Well if an earthquake were to happen right now, lots of people would die' That could be true, but there are ways to kind of cheat death, and as you probably know, that's the only good type of cheating. The most important thing you can do right now is preparing for an earthquake. Even if earthquakes are random, it's valuable information if you know what to do when one happens, instead of just blanking out. You can have a supply bag with emergency items, such as first aid kits (learn how to use them too), a flashlight, spare batteries, etc. Make sure it's in a place that you can remember where it is. Another way you can prepare for an earthquake is practicing earthquake drills. For example, bolting under a table or desk, going to a plain field, put a pillow over your head, etc. Just be prepared for the real event, because you will thank yourself when an earthquake actually

happens. So doing various things during an earthquake will protect you, like protecting your head and going anywhere nothing can fall on top of you. This is crucial to survival because these methods can greatly improve your chances to live. You also have to learn emergency numbers to call after an earthquake. It may seem very overwhelming, but if you practice all of this, it's going to be very useful. Write down numbers for recovery community organizations and keep them in your bag. You should also contact your family so they know your safe after you have called the organizations. These are valuable tips that I cannot emphasize enough how important they are.

So now you can tell what people do during an earthquake and after, including countries. Even though there are a lot of extra steps involved, this is the simplified version. So, now you know what to do during an earthquake, and what your country should do to prepare for an earthquake. Make sure to remember this for your own sake!